



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,519	07/28/2003	Gregory A. Ehlers	68,180-004	4286
26753	7590	09/14/2005	EXAMINER	
ANDRUS, SCEALES, STARKE & SAWALL, LLP 100 EAST WISCONSIN AVENUE, SUITE 1100 MILWAUKEE, WI 53202				SHERR, CRISTINA O
ART UNIT		PAPER NUMBER		
		3621		

DATE MAILED: 09/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/628,519	EHLERS ET AL.
Examiner	Cristina Owen Sherr	Art Unit
		3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 20 June 2005.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-71 is/are pending in the application.
4a) Of the above claim(s) 68 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-67 and 69-71 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date .
4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: _____.

DETAILED ACTION

1. This communication is in response to applicant's amendment filed June 20, 2005. Claims 1, 18, 29, 39, 41, 45, 51, 55, 61, 69, and 71 have been amended. Claim 68 has been canceled. Claims 1-67 and 69-70 are pending in this case.

Response to Arguments

2. Applicant's arguments with respect to claims 1-71 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

5. Regarding claim 1 –

Sneeringer discloses a method for providing at least one program to a utility of a commodity, the program aimed at managing demand for the commodity, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of: delivering the commodity to the subset of devices; measuring the instantaneous rate at which the commodity is being delivered to the subset of the devices; sending the instantaneous rate for each device within the subset to the utility; determining, in real

time, a capacity associated with the delivery of the commodity which may be available for management by activating the program (e.g. col 5 ln 35 – col 6 ln 60).

6. Sneeringer does not disclose, but Stone does, defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

7. Regarding claims 2-9 –

Sneeringer discloses a method including the steps of: activating the program; and, subsequently measuring at least one of a rate and a change in the rate at which the commodity is being delivered to the subset of the devices; including the step of determining an actual capacity of the commodity saved by activating of the program; including the step of providing at least one of an alternate rate and a billing adjustment rebate to at least one customer as a function of the actual capacity managed at the related customer site by the program; wherein the at least one of an alternative rate and a billing adjustment is also a function of historical usage information.; including the step of verifying management of the devices within the subset of the devices; wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining the program includes the step of including within the program all devices of a similar type at each customer site; including the step of allowing a customer to subscribe to the program; wherein the program is mandatory (e.g. col 7 ln 10-45).

8. Regarding claims 10-18 –

Sneeringer discloses a method wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the step of defining at least

one program includes the step of defining a plurality of programs, each program having a respective subset of the devices; wherein the commodity is delivered to the plurality of customer sites through a distribution network, including the step of determining, in real time, a capacity available across the distribution network associated with the delivery of the commodity which may be managed by activating the plurality of programs; including the step of providing a graphical representation of the capacity available across the distribution network; wherein the graphical representation includes at least one of a meter, a bar chart, a line graph, a geophysical display, and a numeric display; wherein the distribution network includes a plurality of substations, the method including the step of determining, in real time, a capacity available on each substation, associated with the delivery of the commodity which may be managed by activating the plurality of programs; wherein the distribution network includes at least one transmission substation and at least one distribution substation associated with each transmission substation, the method including the step of determining, in real time, a capacity available on each substation, associated with the delivery of the commodity which may be managed by activating the plurality of programs; wherein the distribution network includes at least one circuit associated with each distribution substation, the method including the step of determining in real time, a capacity available on each circuit, associated with the delivery of the commodity which may be managed by activating the plurality of programs; including the step of displaying a collapsible/expandable tree of the distribution network containing the at least one transmission substation, the at least one distribution substation associated with each transmission substation, and the at least one circuit associated with each distribution substation, wherein selection of one of the substations and circuit in the distribution network displays associated capacity

information; wherein the collapsible/expandable tee is displayed in a utility interface, the method including the step of displaying a list of the programs available in response to selection a portion of the tree, the available programs corresponding to those available programs which correspond to a portion of the distribution network (e.g. col 8 ln 10-40).

9. Regarding claim 19-36 –

Sneeringer discloses a method wherein the commodity is electrical power; wherein the commodity is water; wherein the commodity is one of natural gas and steam; wherein the step of defining at least one program includes the step of defining a plurality of programs, each program having a respective subset of the devices, the method including the step of providing a search function for identifying at least one program which matches a set of conditions; wherein the set of conditions includes an available capacity; including the step of providing a utility interface; wherein the utility interface is accessible through a web browser; including the step of automatically activating the program under a predetermined set of conditions; wherein the predetermined set of conditions includes at least one of a time of day and a day; including the step of manually activating the program as a function of an actual demand of the commodity; wherein the program at least one of shifts demand away from a first time period and eliminates the demand; including the step of managing the subset of devices in response to activation of the program; wherein the step of controlling the subset of devices includes the step of modifying usage of the commodity during a predetermined period of time; wherein at least one of the devices has an operating set point, and wherein the step of controlling the subset of devices includes the step of modifying the set point; including the steps of receiving a supply request and allowing an operator to responsively activate the program; wherein the program may be activated

at least one of immediately and a future point in time; wherein the supply request includes a request duration, wherein the program may be activated as a function of the request duration; wherein each device has an associated node, and the method includes the step of downloading to each node, a program schedule containing scheduling information for the program (e.g. col 7 ln 25-65).

10. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.

11. Claim 37 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

12. Regarding claim 37 –

Sneeringer discloses a method for providing at least one program to a utility of a commodity, the program aimed at managing demand for the commodity, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of: delivering the commodity to the subset of devices; measuring the instantaneous rate at which the commodity is being delivered to the subset of the devices; sending the instantaneous rate for each device within the subset to the utility; determining, in real time, a capacity associated with the delivery of the commodity which may be managed by activating the program; activating the program; determining an actual rate of consumption of the commodity and a rate of change of consumption induced by activation of the program; and, providing at least one of an alternative rate and a billing adjustment to at least one customer as a function of the actual capacity managed at the related customer site by the program (e.g. col 5 ln 35 – col 6 ln 60).

13. Sneeringer does not disclose, but Stone does, defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

14. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.

15. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

16. Regarding claim 38 –

Sneeringer discloses a method for providing at least one program to a utility of a commodity, the program aimed at managing demand for the commodity, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, including the steps of: delivering the commodity to the subset of devices; measuring the instantaneous rate at which the commodity is being delivered to the subset of the devices; sending the instantaneous rate for each device within the subset to the utility determining, in real time, a capacity associated with the delivery of the commodity which may be managed by activating the program; activating the program; and, verifying management of the devices within the subset of the devices (e.g. col 5 ln 35 – col 6 ln 60).

17. Sneeringer does not disclose, but Stone does, defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

18. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.

19 Claims 39-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

20. Regarding claim 39 –

Sneeringer discloses a method for providing at least one program to a utility of electrical power, the program aimed at managing demand for the electrical power, the utility delivering the electrical power to a plurality of customer sites through a distribution network, each customer site having a plurality of devices which use the electrical power, the distribution network including; at least one transmission substation, at least one distribution substation associated with each transmission substation, and at least one circuit associated with each transmission substation, including the steps of: delivering the electrical power to the subset of devices; measuring the instantaneous rate at which the electrical power is being delivered to the subset of the devices; sending the instantaneous rate for each device within the subset to the utility; and, determining, in real time, a capacity available on at least one of the at least one transmission substation, the at least one distribution, and the at least one circuit network associated with the delivery of the commodity which may be managed by activating the program devices (e.g. col 5 ln 35 – col 6 ln 60).

21. Sneeringer does not disclose, but Stone does, defining a program having a subset of the plurality of devices for which usage, of the electrical power may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

22. Regarding claims 40-41 –

Sneeringer discloses a method including the step of displaying a collapsible/expandable tree of the distribution network containing the at least one transmission substation, the at least one

distribution substation associated with each transmission substation, and the at least one circuit associated with each distribution substation, wherein selection of one of the substations and circuit in the distribution network displays associated at least one of capacity and demand information; wherein the collapsible/expandable tree is displayed in a utility interface, the method including the step of displaying a list of the programs available in response to selection a portion of the tree, the available programs corresponding to those available programs which correspond to a portion of the distribution network (e.g. col 3 ln 10 – col 4 ln 55).

23. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.
24. Claims 42-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).
25. Regarding claim 42 –

Sneeringer discloses a system for providing at least one program to a utility of a commodity, the program aimed at managing demand for the commodity, the utility delivering the commodity to at least one customer site, the customer site having a plurality of devices which use the commodity, comprising a distribution network for delivering the commodity to the subset of devices; a node, coupled to each device, for measuring the instantaneous rate at which the commodity is being delivered to the subset of the devices; and, a control system coupled to the utility interface, the distribution network, and each node, for controlling delivery of the commodity and determining, in real time, a capacity associated with the delivery of the commodity which may be available by activating the program as a function of the measured instantaneous rate (e.g. col 5 ln 35 – col 6 ln 60).

26. Sneeringer does not disclose, but Stone does, defining a program having a utility interface, operable by a user, for defining a program having a subset of the plurality of devices for which usage of the commodity may be limited by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

27. Regarding claims 43 - 56 –

Sneeringer discloses a program and the nodes adapted to subsequently measure the rate at which the commodity is being delivered to the subset of the devices; the control system for determining at least one of an actual rate of consumption of the commodity and a change in a rate of consumption induced by activating of the program; wherein the control system determines at least one of an alternative rate and a billing adjustment to at least one customer as a function of the actual capacity managed at the related customer site by the program; wherein the at least one of an alternative rate and a billing adjustment is also a function of historical usage information; wherein the control system verifies management of the devices within the subset of the devices; wherein the utility delivers the commodity to a plurality of customer sites, each customer site having a plurality of devices and the utility interface allows the user to define a plurality of programs, each program having a respective subset of the devices; wherein the commodity is delivered to the plurality of customer sites through a distribution network, wherein the control system determines, in real time, a capacity available across the distribution network associated with the delivery of the commodity which may be managed by activating the plurality of Programs; wherein the utility interface includes a graphical representation of the capacity available across the distribution network; wherein the graphical representation includes at least one of a meter, a bar chart, a line graph, a geophysical map, and a numerical display; wherein the

distribution network includes a plurality of substations, the control system being adapted to determine in real time, a capacity available on each substation, associated with the, delivery of the commodity which may be managed by activating the plurality of programs; wherein the distribution network includes at least one transmission substation and at least one distribution substation associated with each transmission substation, the control system being adapted to determine, in real time, a capacity available on each substation, associated with the delivery of the commodity which may be managed by activating the plurality of programs; wherein the distribution network includes at least one circuit associated with each distribution substation, the control system, being adapted to determine in real time, a capacity available on each circuit, associated with the delivery of the commodity which may be managed by activating the plurality of programs; the utility interface being adapted to display a collapsible/expandable tree of the distribution network containing the at least one transmission substation, the at least one distribution substation associated with each transmission substation, and the at least one circuit associated with each distribution substation, wherein selection of one of the substations and circuit in the distribution network displays associated capacity information related to capacity that can be managed by the programs; wherein the utility interface displays a list of the programs available in response to selection a portion of the tree, the available programs corresponding to those available programs which correspond to a portion of the distribution network (e.g. col 7 ln 10-45).

28 Regarding claims 57 – 67 –

Sneeringer discloses a system wherein the commodity is electrical power; wherein the commodity is water; wherein the commodity is one of gas and

steam; wherein the control system defines at least one program includes the step of defining a plurality of programs, each program having a respective subset of the devices, and provides a search function for identifying at one program which matches a set of predetermined conditions; wherein the set of predetermined conditions includes an available capacity that can be managed by the programs; wherein the utility interface is accessible through a web browser; wherein the program shifts demand away and eliminates demand from a first time period; wherein the control system controls the subset of devices in response to activation of the program; wherein the control system controls the subset of devices by at least one of limiting and increasing usage of the commodity during a predetermined period of time; wherein at least one of the devices has an operating set point, and wherein the control system controls the at least one of the devices by modifying the set point; wherein each device has an associated node, and the method includes the step of downloading to each node, a program schedule containing scheduling information for the program (e.g. col 7 ln 25-65).

29. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.

30. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

31. Sneeringer does not disclose, but Stone does, defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

32. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.

33. Claims 69-71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sneeringer (US 6,618,709) in view of Stone et al (US 6,446,045).

34. Regarding claim 69 –

Sneeringer discloses a system for providing at least one program to a utility of electrical power, the program aimed at managing demand for the electrical power, the utility delivering the electrical power to a plurality of customer sites, each customer site having a plurality of devices which use the electrical power, comprising: a distribution network for delivering the commodity to the sub-set of devices, the distribution network including at least one transmission substation, at least one distribution substation associated with each transmission substation, and at least one circuit associated with each transmission substation; a node, coupled to each device, for measuring the instantaneous rate at which the commodity is being delivered to the subset of the devices; and a control system coupled to the utility interface, the distribution network, and each node, for controlling delivery of the commodity and determining, in real time, a capacity available on at least one of the at least one transmission substation, the at least one distribution, and the at least one circuit network associated with the delivery of the commodity which may be managed by activating the program (e.g. col 5 ln 35 – col 6 ln 60).

35. Sneeringer does not disclose, but Stone does, a utility interface, operable by a user, for defining a program having a subset of the plurality of devices for which usage of the commodity may be managed by activating the program (e.g. col 3 ln 10 – col 4 ln 55).

36. Regarding claim 70-71 –

Sneeringer discloses a system wherein the utility interface displays a collapsible/expandable tree of the distribution network containing the at least one transmission substation, the at least one

distribution substation associated with each transmission substation, and the at least one circuit associated with each distribution substation, wherein selection of one of the substations and circuit in the distribution network displays associated capacity information; wherein the utility interface displays a list of the programs available in response to selection a portion of the tree, the available programs corresponding to those available programs which correspond to a portion of the distribution network (e.g. col 3 ln 10 – col 4 ln 55).

37. It would be obvious to one of ordinary skill in the art to combine the teachings of Sneeringer and Stone in order to manage commodity usage in a more efficient manner.
38. Examiner's note: Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

39. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cristina Owen Sherr whose telephone number is 571- 272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.
40. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on 571-272-6712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

41. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

COS

Julia Jane B
PRIMARY EXAMINER